

"BLUE CHIP" TRANSFORMERS

62 TYPES

5 DIFFERENT SIZES

Tiny, plastic cased, Blue Chip transformers for printed circuit applications, are available for a wide choice of power ratings.

Five different sizes, from .10 to 1.2 cubic inches with a total of 62 new ratings are listed below to indicate the available power levels for both voice frequency range and extended frequency operation. These ratings take into account not only power handling capacities at minimum frequencies, but also total harmonic distortion under stated conditions. Within the limits shown on the rating charts, variations in both power and distortion levels are possible depending upon the minimum operating frequency.

Blue Chip transformers meet Mil-T-27A, Grade 5, Class S requirements. These versatile transformers are available from ADC, or through your distributor.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.15 oz.

RESPONSE: ± 2 DB 300 to 100,000 CPS.
DISTORTION: 10% at 30 MW, 300 to 100,000 CPS, except as noted.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.4 oz.

RESPONSE: ± 1 DB 200 to 50,000 CPS.
DISTORTION: 10% at 150 MW, 200 to 50,000 CPS.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 0.9 oz.

RESPONSE: ± 1 DB 200 to 20,000 CPS.
DISTORTION: 10% at 750 MW, 200 to 20,000 CPS.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 1.5 oz.
Mounting: 2-4x40 inserts, 0.6"x0.8"

RESPONSE: ± 1 DB 100 to 10,000 CPS.
DISTORTION: 1.5% at 60 MW, 100 to 10,000 CPS, or 10% at 3.5 W, 200 to 10,000 CPS, except as noted.

Pin Diameter:
.030"
Pin Length: 1/2"
Weight: 2.5 oz.
Mounting: 2-0.8"x0.8"

RESPONSE: ± 1 DB 60 to 10,000 CPS.
DISTORTION: 1% at 250 MW, 60 to 10,000 CPS or 10% at 7.5 W, 200 to 10,000 CPS, except as noted.

CATALOG NUMBER	PRIMARY IMPED.-OHMS	SECONDARY IMPED.-OHMS	PRIMARY-SECONDARY DC RESISTANCE-OHMS		MAX. DC IN PRIM. MA.
324-6A	*100K-CT	1000-CT	3300	70	0
324-6B	25K-CT	1000-CT	2800	150	0
124-6C	10K-CT	10K-CT	1100	1400	1
324-6D	10K-CT	1500-CT	1100	180	1
324-6E	10K-CT	600-CT	1100	75	1
224-6F	4000-CT	10K-CT	440	1400	1.5
324-6G	1000-CT	600-CT	110	75	3
324-6H	1000-CT	4	110	0.5	3
224-6J	600-CT	25K-CT	65	3500	4
124-6K	600-CT	600-CT	65	75	4
324-6L	600-CT	60	65	7	4
324-6M	600-CT	4	65	0.5	4

★Max. power level: 10 mw at 300 cps.

324-5A	100K-CT	1000-CT	6000	60	0
324-5B	25K-CT	1000-CT	2800	120	0
124-5C	10K-CT	10K-CT	1100	1200	1
324-5D	10K-CT	1500-CT	1100	200	1
324-5E	10K-CT	600-CT	1100	75	1
224-5F	4000-CT	10K-CT	440	1200	1.5
324-5G	1000-CT	600-CT	100	60	3
324-5H	1000-CT	4	100	0.4	3
224-5J	600-CT	25K-CT	65	3500	4
124-5K	600-CT	600-CT	65	75	4
324-5L	600-CT	60	65	7	4
324-5M	600-CT	4	65	0.5	4

324-4B	25K-CT	1000-CT	2800	120	0
124-4C	10K-CT	10K-CT	1100	1200	1
324-4D	10K-CT	1500-CT	1100	180	1
324-4E	10K-CT	600-CT	1100	75	1
324-4F	10K-CT	4	1100	0.5	1
224-4G	4000-CT	10K-CT	440	1200	1.5
324-4H	1500-CT	15	165	2	2.5
324-4J	1000-CT	600-CT	110	75	3
324-4K	1000-CT	4	110	0.5	3
224-4L	600-CT	25K-CT	65	3000	4
124-4M	600-CT	600-CT	65	75	4
324-4N	600-CT	60	65	7	4
324-4P	600-CT	15	65	2	4
324-4Q	600-CT	4	65	0.5	4
224-4R	250	600-CT	30	75	7

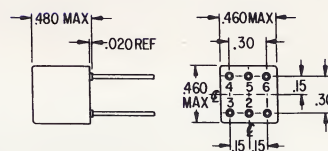
324-3A	10K-CT	10K-CT	800	1100	1
324-3B	10K-CT	600-CT	800	65	1
324-3C	10K-CT	4	800	0.5	1
324-3D	1500-CT	15	110	1.6	2.5
324-3E	1000-CT	600-CT	75	65	3
324-3F	1000-CT	4	75	0.5	3
224-3G	*600-CT	25K-CT	45	2800	4
124-3H	600-CT	600-CT	45	65	4
324-3J	600-CT	60	45	7	4
324-3K	600-CT	15	45	1.6	4
324-3L	600-CT	4	45	0.5	4
224-3M	250	600-CT	20	65	7

★Max. power level: 2.5 w.

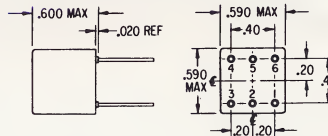
124-2A	*10K-CT	10K-CT	700	900	1
324-2B	*10K-CT	600-CT	700	55	1
324-2C	*10K-CT	4	700	0.4	1
324-2D	1500-CT	15	100	1.5	2.5
324-2E	1000-CT	600-CT	65	55	3
324-2F	1000-CT	4	65	0.4	3
124-2H	600-CT	600-CT	40	55	4
324-2J	600-CT	60	40	6	4
324-2K	600-CT	15	40	1.5	4
324-2L	600-CT	4	40	0.4	4
224-2M	250	600-CT	16	55	7

★Max. power level: 6 w.

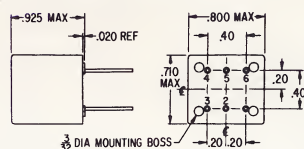
6 SIZE CASE DATA



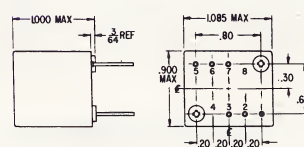
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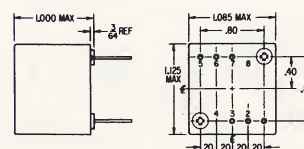
4 SIZE CASE DATA



3 SIZE CASE DATA



2 SIZE CASE DATA



ALL RATINGS BASED UPON MAXIMUM UNBALANCED DC IN PRIMARY AS LISTED

ALL CASED DIMENSIONS ARE MAXIMUM

What's the Case Size?

(1)	(2)			(3)			(4)	(5)					(6)
MIL-T-27A CASE DESIGNATION	MAX. OUTSIDE DIMENSIONS MIL-T-27A			MOUNTING DIMENSIONS PER MIL-T-27A			APPROX. LBS. WITH NOMINAL CORE	VA REFERENCE					DIAM. TERMINAL KNOCK-OUT REQ.
								25 CPS Using .019 In. Tran. 'C' Lamination	50-60 CPS Using .019 In. Tran. 'C' Lamination	50-60 CPS Using .014 In. Silectron Lamination	400-2600 CPS Using .014 In. Silectron Lamination	400-2600 CPS Using .004 In. Silectron "C" Cores	
	A	B	C	D	E	F							
AF	.750	.750	1.125	.563 Diagonal	4-40 x $\frac{3}{8}$		.05		1	1	1-2	2-3	-
AG	1.000	1.000	1.375	.750 Diagonal	4-40 x $\frac{3}{8}$		.1		1-2	2-3	3-5	6-10	-
AH	1.312	1.312	1.750	1.250 Diagonal	6-32 x $\frac{3}{8}$		.3	1-3	3-5	4-6	5-10	10-20	1.
AJ	1.625	1.625	2.375	1.187	1.187	6-32 x $\frac{3}{8}$	.6	2-4	4-8	5-9	7-15	14-30	1.375
EA	1.937	1.812	2.750	1.375	1.250	6-32 x $\frac{3}{8}$	1.0	6-8	10-13	12-15	20-40	40-80	1.5
EB	1.937	1.812	2.437	1.375	1.250	6-32 x $\frac{3}{8}$	.9	3-5	6-10	7-12	15-25	30-50	1.5
FA	2.312	2.062	3.125	1.687	1.437	6-32 x $\frac{3}{8}$	2.0	10-15	20-30	24-34	35-60	70-120	1.75
FB	2.312	2.062	2.500	1.687	1.437	6-32 x $\frac{3}{8}$	1.5		14-20	17-24	30-50	60-100	1.75
GA	2.750	2.375	3.812	2.125	1.750	6-32 x $\frac{3}{8}$	3.0	17-25	35-50	40-60	60-100	120-200	2.125
GB	2.750	2.375	2.812	2.125	1.750	6-32 x $\frac{3}{8}$	2.4		20-30	24-43	50-75	100-150	2.125
HA	3.062	2.625	4.250	2.296	1.859	8-32 x $\frac{3}{8}$	4.0	25-40	40-60	50-75	80-120	140-240	2.375
HB	3.062	2.625	3.187	2.296	1.859	8-32 x $\frac{3}{8}$	3.0	20-35	35-50	40-60	65-100	130-200	2.375
JA	3.562	3.062	4.875	2.625	2.125	8-32 x $\frac{3}{8}$	6.0	40-50	60-80	70-100	150-190	300-380	2.75
JB	3.562	3.062	3.875	2.625	2.125	8-32 x $\frac{3}{8}$	5.0	35-40	50-70	60-90	130-175	260-350	2.75
KA	3.937	3.375	5.250	3.000	2.437	10-32 x $\frac{1}{2}$	8.5	60-70	80-100	95-150	175-225	350-450	3.0
KB	3.937	3.375	4.312	3.000	2.437	10-32 x $\frac{1}{2}$	7.5	50-60	75-95	90-140	160-210	320-420	3.0
LA	4.312	3.687	5.562	3.312	2.687	10-32 x $\frac{1}{2}$	11.0	70-100	100-160	120-180	225-325	450-650	3.25
LB	4.312	3.687	4.500	3.312	2.687	10-32 x $\frac{1}{2}$	9.0	60-90	95-130	100-170	200-300	400-600	3.25
MA	4.687	4.000	6.000	3.687	3.000	$\frac{1}{4}$ -20 x $\frac{5}{8}$	16.0	150-175	175-250	190-350	400-700	800-1200	3.625
MB	4.687	4.000	4.937	3.687	3.000	$\frac{1}{4}$ -20 x $\frac{5}{8}$	13.0	120-150	160-200	180-275	300-600	600-1000	3.625
NA	5.062	4.312	6.812	4.062	3.312	$\frac{1}{4}$ -20 x $\frac{5}{8}$	17.0	160-200	225-300	250-450	500-1000	1000-2000	3.75
NB	5.062	4.312	5.500	4.062	3.312	$\frac{1}{4}$ -20 x $\frac{5}{8}$	16.0	150-180	200-300	250-450	500-1000	1000-2000	3.75
OA	5.50	4.50	6.75	3.75	3.00	$\frac{1}{4}$ -20 x $\frac{5}{8}$	25.0	225-300	350-400	375-550	700-1200	1200-2500	4.0

Notes:

Column 1:
The Official MIL-T-27A case designation.

Column 2:
Tolerances on dimensions A & B:
AF thru AJ, +0 to $-\frac{1}{16}$ ".
Others, +0 to $-\frac{1}{8}$ ".
Tolerances on dimension C:
AF thru AJ, +0 to $-\frac{1}{8}$ ".
Others, +0 to $-\frac{1}{16}$ ".

Column 3:
Tolerances on dimensions D & E:
AJ thru JB, $\pm\frac{1}{64}$ ".
KA thru LB, $\pm\frac{1}{32}$ ".
MA thru OA, $\pm\frac{3}{64}$ ".
Diagonal, $\pm.002$ " (AF-AH).
Stud length under $\frac{1}{2}$ ", $\pm\frac{1}{16}$ ".
Stud length over $\frac{1}{2}$ ", $\pm\frac{1}{8}$ ".
AG Mtg: Recommend Non-Std. dimension .968 diagonal for more than two terminals.

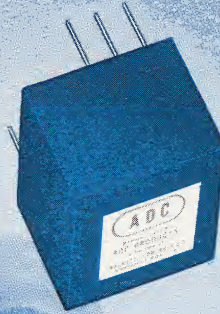
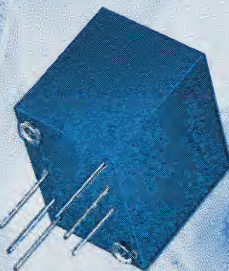
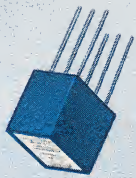
Column 5. Primary VA (Watts for resistive loads) reference is based on a two-winding filament transformer, standard MIL-T-27-A case construction, gray finish, and potted with an asphalt compound. The temperature rise for this condition is 40° cent. in a 65° cent. ambient temperature. The minimum figure in each column represents a typical transformer. VA must be reduced for such factors as multiple taps, added windings, high dielectric breakdown requirements, and non-sinusoidal waveforms as with rectified loads.



ADC PRODUCTS
A DIVISION OF MAGNETIC CONTROLS CO.

TRANSFORMERS ■ FILTERS ■ JACKS & PLUGS ■ TERMINAL BLOCKS

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"BLUE CHIP" TRANSFORMERS

62 TYPES

5 DIFFERENT SIZES

Tiny, plastic cased, Blue Chip transformers for printed circuit applications, are available for a wide choice of power ratings.

Five different sizes, from .10 to 1.2 cubic inches with a total of 62 new ratings are listed below to indicate the available power levels for both voice frequency range and extended frequency operation. These ratings take into account not only power handling capacities at minimum frequencies, but also total harmonic distortion under stated conditions. Within the limits shown on the rating charts, variations in both power and distortion levels are possible depending upon the minimum operating frequency.

Blue Chip transformers meet Mil-T-27A, Grade 5, Class S requirements. These versatile transformers are available from ADC, or through your distributor.

Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.15 oz.

RESPONSE: ± 2 DB 300 to 100,000 CPS.
DISTORTION: 10% at 30 MW, 300 to 100,000 CPS, except as noted.

Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.15 oz.

RESPONSE: ± 1 DB 200 to 50,000 CPS.
DISTORTION: 10% at 150 MW, 200 to 50,000 CPS.

Pin Diameter: .030"
Pin Length: 1/2"
Weight: 0.9 oz.

RESPONSE: ± 1 DB 200 to 20,000 CPS.
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Pin Diameter: .030"
Pin Length: 1/2"
Weight: 1.5 oz.
Mounting: 2-4x40 Inserts, 0.6"x0.8"

RESPONSE: ± 1 DB 100 to 10,000 CPS.
DISTORTION: 1.5% at 60 MW, 100 to 10,000 CPS, or 10% at 3.5 W, 200 to 10,000 CPS, except as noted.

Pin Diameter: .030"
Pin Length: 1/2"
Weight: 2.5 oz.
Mounting: 2-4x40 Inserts, 0.8"x0.8"

RESPONSE: ± 1 DB 60 to 10,000 CPS.
DISTORTION: 1% at 250 MW, 60 to 10,000 CPS or 10% at 7.5 W, 200 to 10,000 CPS, except as noted.

CATALOG NUMBER	PRIMARY IMPED.—OHMS	SECONDARY IMPED.—OHMS	PRIMARY-SECONDARY DC RESISTANCE—OHMS		MAX. DC IN PRIM. MA.
324-6A	*100K-CT	1000-CT	3300	70	0
324-6B	25K-CT	1000-CT	2800	150	0
324-6C	10K-CT	1000-CT	1100	1400	1
324-6D	10K-CT	1500-CT	1100	180	1
324-6E	10K-CT	600-CT	1100	75	1
324-6F	4000-CT	10K-CT	440	1400	1.5
324-6G	1000-CT	600-CT	110	75	3
324-6H	1000-CT	4	110	0.5	3
324-6J	600-CT	25K-CT	65	3500	4
324-6K	600-CT	600-CT	65	75	4
324-6L	600-CT	60	65	7	4
324-6M	600-CT	4	65	0.5	4

★Max. power level: 10 mw at 300 cps.

324-5A	100K-CT	1000-CT	6000	60	0
324-5B	25K-CT	1000-CT	2800	120	0
324-5C	10K-CT	10K-CT	1100	1200	1
324-5D	10K-CT	1500-CT	1100	200	1
324-5E	10K-CT	600-CT	1100	75	1
324-5F	4000-CT	10K-CT	440	1200	1.5
324-5G	1000-CT	600-CT	100	60	3
324-5H	1000-CT	4	100	0.4	3
324-5J	600-CT	25K-CT	65	3500	4
324-5K	600-CT	600-CT	65	75	4
324-5L	600-CT	60	65	7	4
324-5M	600-CT	4	65	0.5	4

324-4B	25K-CT	1000-CT	2800	120	0
324-4C	10K-CT	10K-CT	1100	1200	1
324-4D	10K-CT	1500-CT	1100	180	1
324-4E	10K-CT	600-CT	1100	75	1
324-4F	10K-CT	4	1100	0.5	1
324-4G	4000-CT	10K-CT	440	1200	1.5
324-4H	1500-CT	15	165	2	2.5
324-4J	1000-CT	600-CT	110	75	3
324-4K	1000-CT	4	110	0.5	3
324-4L	600-CT	25K-CT	65	3000	4
324-4M	600-CT	600-CT	65	75	4
324-4N	600-CT	60	65	7	4
324-4P	600-CT	15	65	2	4
324-4Q	600-CT	4	65	0.5	4
324-4R	250	600-CT	30	75	7

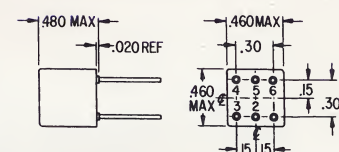
324-3A	10K-CT	10K-CT	800	1100	1
324-3B	10K-CT	600-CT	800	65	1
324-3C	10K-CT	4	800	0.5	1
324-3D	1500-CT	15	110	1.6	2.5
324-3E	1000-CT	600-CT	75	65	3
324-3F	1000-CT	4	75	0.5	3
324-3G	*600-CT	25K-CT	45	2800	4
324-3H	600-CT	600-CT	45	65	4
324-3J	600-CT	60	45	7	4
324-3K	600-CT	15	45	1.6	4
324-3L	600-CT	4	45	0.5	4
324-3M	250	600-CT	20	65	7

★Max. power level: 2.5 w.

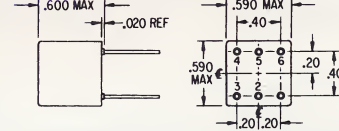
324-2A	*10K-CT	10K-CT	700	900	1
324-2B	*10K-CT	600-CT	700	55	1
324-2C	*10K-CT	4	700	0.4	1
324-2D	1500-CT	15	100	1.5	2.5
324-2E	1000-CT	600-CT	65	55	3
324-2F	1000-CT	4	65	0.4	3
324-2H	600-CT	600-CT	40	55	4
324-2J	600-CT	60	40	6	4
324-2K	600-CT	15	40	1.5	4
324-2L	600-CT	4	40	0.4	4
324-2M	250	600-CT	16	55	7

★Max. power level: 6 w.

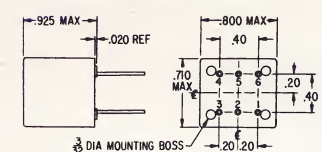
6 SIZE CASE DATA



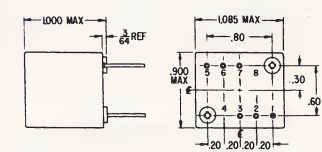
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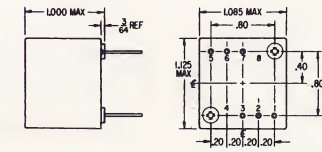
4 SIZE CASE DATA



3 SIZE CASE DATA



2 SIZE CASE DATA



ALL RATINGS BASED UPON MAXIMUM UNBALANCED DC IN PRIMARY AS LISTED
ALL CASED DIMENSIONS ARE MAXIMUM

What's the Case Size?

(1)	(2)			(3)			(4)	(5)					(6)
MIL-T-27A CASE DESIGNATION	MAX. OUTSIDE DIMENSIONS MIL-T-27A			MOUNTING DIMENSIONS PER MIL-T-27A			APPROX. LBS. WITH NOMINAL CORE	VA REFERENCE					DIAM. TERMINAL KNOCK-OUT REQ.
								25 CPS Using .019 In. Tran. 'C' Lamination	50-60 CPS Using .019 In. Tran. 'C' Lamination	50-60 CPS Using .014 In. Silectron Lamination	400-2600 CPS Using .014 In. Silectron Lamination	400-2600 CPS Using .004 In. Silectron "C" Cores	
	A	B	C	D	E	F							
AF	.750	.750	1.125	.563 Diagonal		4-40 x 3/8	.05		1	1	1-2	2-3	-
AG	1.000	1.000	1.375	.750 Diagonal		4-40 x 3/8	.1		1-2	2-3	3-5	6-10	-
AH	1.312	1.312	1.750	1.250 Diagonal		6-32 x 3/8	.3	1-3	3-5	4-6	5-10	10-20	1.
AJ	1.625	1.625	2.375	1.187	1.187	6-32 x 3/8	.6	2-4	4-8	5-9	7-15	14-30	1.375
EA	1.937	1.812	2.750	1.375	1.250	6-32 x 3/8	1.0	6-8	10-13	12-15	20-40	40-80	1.5
EB	1.937	1.812	2.437	1.375	1.250	6-32 x 3/8	.9	3-5	6-10	7-12	15-25	30-50	1.5
FA	2.312	2.062	3.125	1.687	1.437	6-32 x 3/8	2.0	10-15	20-30	24-34	35-60	70-120	1.75
FB	2.312	2.062	2.500	1.687	1.437	6-32 x 3/8	1.5		14-20	17-24	30-50	60-100	1.75
GA	2.750	2.375	3.812	2.125	1.750	6-32 x 3/8	3.0	17-25	35-50	40-60	60-100	120-200	2.125
GB	2.750	2.375	2.812	2.125	1.750	6-32 x 3/8	2.4		20-30	24-43	50-75	100-150	2.125
HA	3.062	2.625	4.250	2.296	1.859	8-32 x 3/8	4.0	25-40	40-60	50-75	80-120	140-240	2.375
HB	3.062	2.625	3.187	2.296	1.859	8-32 x 3/8	3.0	20-35	35-50	40-60	65-100	130-200	2.375
JA	3.562	3.062	4.875	2.625	2.125	8-32 x 3/8	6.0	40-50	60-80	70-100	150-190	300-380	2.75
JB	3.562	3.062	3.875	2.625	2.125	8-32 x 3/8	5.0	35-40	50-70	60-90	130-175	260-350	2.75
KA	3.937	3.375	5.250	3.000	2.437	10-32 x 1/2	8.5	60-70	80-100	95-150	175-225	350-450	3.0
KB	3.937	3.375	4.312	3.000	2.437	10-32 x 1/2	7.5	50-60	75-95	90-140	160-210	320-420	3.0
LA	4.312	3.687	5.562	3.312	2.687	10-32 x 1/2	11.0	70-100	100-160	120-180	225-325	450-650	3.25
LB	4.312	3.687	4.500	3.312	2.687	10-32 x 1/2	9.0	60-90	95-130	100-170	200-300	400-600	3.25
MA	4.687	4.000	6.000	3.687	3.000	1/4-20 x 5/8	16.0	150-175	175-250	190-350	400-700	800-1200	3.625
MB	4.687	4.000	4.937	3.687	3.000	1/4-20 x 5/8	13.0	120-150	160-200	180-275	300-600	600-1000	3.625
NA	5.062	4.312	6.812	4.062	3.312	1/4-20 x 5/8	17.0	160-200	225-300	250-450	500-1000	1000-2000	3.75
NB	5.062	4.312	5.500	4.062	3.312	1/4-20 x 5/8	16.0	150-180	200-300	250-450	500-1000	1000-2000	3.75
OA	5.50	4.50	6.75	3.75	3.00	1/4-20 x 5/8	25.0	225-300	350-400	375-550	700-1200	1200-2500	4.0

Notes:

Column 1:
The Official MIL-T-27A case designation.

Column 2:
Tolerances on dimensions A & B:
AF thru AJ, +0 to -1/8".
Others, +0 to -1/8".

Tolerances on dimension C:
AF thru AJ, +0 to -1/8".
Others, +0 to -1/8".

Column 3:
Tolerances on dimensions D & E:
AJ thru JB, ±1/64".
KA thru LB, ±1/32".
MA thru OA, ±3/64".
Diagonal, ±.002" (AF-AH).
Stud length under 1/2", ±1/8".
Stud length over 1/2", ±1/16".
AG Mtg: Recommend Non-Std. dimension .968 diagonal for more than two terminals.

Column 5. Primary VA (Watts for resistive loads) reference is based on a two-winding filament transformer, standard MIL-T-27-A case construction, gray finish, and potted with an asphalt compound. The temperature rise for this condition is 40° cent. in a 65° cent. ambient temperature. The minimum figure in each column represents a typical transformer. VA must be reduced for such factors as multiple taps, added windings, high dielectric breakdown requirements, and non-sinusoidal waveforms as with rectified loads.



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